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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR         | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------------|---------------------|------------------|
| 10/766,526  | 01/29/2004  | Albert Johannes Maria Jansen | 081468-0308019      | 2235             |
| 909 7590 04/08/2008 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 |             |                              | EXAMINER            |                  |
|   |             |                              | FULLER, RODNEY EVAN |                  |
| MCLEAN, VA 22102  |             |                              | ART UNIT            | PAPER NUMBER     |
|   |             |                              | 2862                |                  |
|   |             |                              |                     |                  |
|   |             |                              | MAIL DATE           | DELIVERY MODE    |
|   |             |                              | 04/08/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.  | Applicant(s)  |  |  |  |  |  |
|--|--|---|--|--|--|--|--|
|  | 10/766,526   | JANSEN ET AL.   |  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |  |
|  | Rodney E. Fuller   | 2862  |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence address   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | Lely filed the mailing date of this communication. (35 U.S.C. § 133). |  |  |  |  |  |
| Status   |  |   |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>03 Ja</u>   | nuarv 2008.  |   |  |  |  |  |  |
| ,— · · · · · · · · · · · · · · · · · · ·   | action is non-final.   |   |  |  |  |  |  |
| <i>,</i> —   | <del></del>  |   |  |  |  |  |  |
|  | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-32</u> is/are pending in the application.  |  |   |  |  |  |  |  |
| ,— , , , — , , , , , , , , , , , , , ,   | 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
| 5)⊠ Claim(s) <u>1-25</u> is/are allowed.   | _  |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>26 and 31</u> is/are rejected.   | ·= · · · ·   |   |  |  |  |  |  |
| 7) Claim(s) <u>27-30 and 32</u> is/are objected to.  |  |   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.  |   |  |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examine  | •  |   |  |  |  |  |  |
| •  | 10)⊠ The drawing(s) filed on 29 January 2004 is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |   |  |  |  |  |  |
| ,  | <i>'</i> — · <i>'</i> — <i>'</i>   | •   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |   |  |  |  |  |  |
| <u> </u>   | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  | , total of 101111   10 10 <b>2</b> 1                                  |  |  |  |  |  |
|  | iitda251100.0.0440/a   | (4) (5)   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign  | priority under 35 U.S.C. § 119(a)  | -(a) or (t).  |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   | . bassa basa na aissa d  |   |  |  |  |  |  |
|  | 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
|  | 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |
| <del></del>  | 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |   |  |  |  |  |  |
|  |  |   |  |  |  |  |  |
| Attachment(s)  |  |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary   |   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da<br>5) Notice of Informal P   |   |  |  |  |  |  |
| Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date  | 6) Other:  | atom, ipproducti  |  |  |  |  |  |
|  |  |   |  |  |  |  |  |

Application/Control Number: 10/766,526 Page 2

Art Unit: 2862

## **DETAILED ACTION**

#### Remarks

1. In response to applicant's Amendment, dated January 3, 2008, the examiner acknowledges the addition of claim 32. Claims 1-32 are pending.

- 2. Regarding the 35 U.S.C 102(b) rejection of claims 1-31 as being anticipated by Suwa (US 6,191,429), the examiner has considered applicant's arguments in light of the amended claims and withdraws the rejection corresponding to independent claims 1 and 11 (i.e., claims 1-25).
- 3. Regarding independent claim 26, the applicant makes the argument that "Suwa merely discloses a single first portion of the reticle R, i.e., entire pattern Pa, that is scanned onto the wafer W and further that the first portion of the reticle R is exposed onto spatially separate shot areas SAa, SAb that neither abut nor overlap each other." The examiner maintains that the limitation "a first portion of said mask" can be considered a portion of the mask (i.e., IA) and not the entire pattern Pa as argued by the applicant. Further, the examiner maintains that the image of the right most portion of the mask will abut the image of the left most portion of the mask (i.e., area where substrate portions SAb and SAa are abutting). Thus, regarding independent claim 26, the examiner has considered applicant's arguments in light of the amended claims and maintains the rejection.

Application/Control Number: 10/766,526 Page 3

Art Unit: 2862

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Suwa (US 6,191,429).

Regarding claim 26, Suwa discloses "a mask table (Fig. 1, ref.# 13) configured to hold a mask (Fig. 1, ref.# R), the mask configured to impart a beam of radiation with a pattern (Fig. 1, ref.# Pa); a substrate table (Fig. 1, ref.# 34) configured to hold a substrate (Fig. 1, ref.# W); and a projection system (Fig. 1, ref.# PL) configured to project the patterned beam of radiation through a liquid (Fig. 9, ref.# LW) onto a substrate, wherein the apparatus is configured to at least partly fill a space between said projection system (Fig. 1, ref.# PL) and the substrate (Fig. 1, ref.# W) with a liquid and is configured to position the mask such that a first portion (Fig. 2, portion defined by IA at far right of Pa) of said mask is projected during a first scanning motion onto a first portion (Fig. 2, ref.# SAa) of the substrate and a second portion of said mask (Fig. 2, portion defined by IA at far left of Pa) is projected during a second subsequent scanning motion onto a second portion (Fig. 2, ref.# SAb) of the substrate abutting or overlapping the first portion of the substrate.

Regarding claim 31, Suwa discloses "wherein said mask table is configured to accommodate the mask in N positions to allow imaging of a pattern up to N times the

Application/Control Number: 10/766,526 Page 4

Art Unit: 2862

length of the exposure field in the first direction, where N is in the range of from 2 to 5." (Figures 1 and 2 show wherein the mask is movable such that the total surface of the reticle can slide past the optical axis of the projection system.)

## Allowable Subject Matter

- 6. Claims 1-25 are allowed.
- 7. Claims 27-30 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Bruning, et al. (US 5,281,996), Isohata, et al. (US 4,878,086) and Nikkel (US 4,758,863).
- 9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rodney E Fuller/ Primary Examiner, Art Unit 2862